

REMARKS

Claim 11 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In response thereto, Applicant's have amended the claims in order to provide the proper antecedent basis for the limitation "super structure." Accordingly, Applicant contend that all of the claims are now in full compliance with the provisions of 35 U.S.C. §112.

Claims 1, 2, 5-7, and 14-15 are rejected under 35 U.S.C. §102(b) as being anticipated by Kewitsch et al. '751. In addition, claims 1-13, 16 and 17 are rejected under 35 U.S.C. §102(b) as being anticipated by Damask et al. '051.

The Examiner's rejections are respectfully traversed.

Independent claim 1 has now been amended to recite a large bandwidth add-drop filter for a planar waveguide device. The device comprises at least one coupler receiving an input signal and providing an output signal, and at least two grating waveguides with superstructure and superperiod having a photonic band-gap covering at least 4 optical channels. Kewitsch et al. '751 describes a grating assisted directional coupler. It will be understood by those of skill in the art that a grating assisted directional coupler is fundamentally different than the device being claimed in the present application. Kewitsch et al. '751 simply does not describe or suggest a coupler receiving an input signal and providing an output signal, and grating waveguides with superstructure and superperiod having a photonic band-gap covering at least four optical channels.

Instead, Kewitsch et al. '751 teaches an asymmetric coupler add/drop device that functions as a grating assisted coupler. The patent simply does not anticipate the operational mode of a dual-arm superstructure photonic band-gap grating device as claimed. Damask et al. '051 also describes a grating assisted directional coupler. As was the case with Kewitsch et al. '751, the device described in Damask '051 is fundamentally different than the device being claimed in the present invention. Damask et al. '051 simply does not describe or suggest a

coupler receiving an input signal and providing an output signal, and grating waveguides with superstructure and superperiod having a photonic band-gap covering at least four optical channels.

Instead, Damask et al. '051 teaches a wavelength-selective optical filter that functions as a grating assisted coupler. In addition, Damask et al. '051 also teaches an optical switch that functions as interferometer. The reference simply does not anticipate the operational mode of the device being claimed in the present invention.

In accordance with the foregoing comments, it will be appreciated that neither Kewitsch et al. '751 nor Damask et al. '051 anticipate the invention under the provisions of 35 U.S.C. §102. Accordingly, Applicant's submit that claims 1, 2, and 4-15 are patentable over the prior art of record.

The application is now considered to be in condition for allowance, and an early indication of same is earnestly requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Matthew E. Connors", written over a horizontal line.

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